

CLAIMS

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1. A composite driving belt provided with a carrier and a plurality of transverse elements assembled freely slideable thereon, the carrier comprising one or more bands, (preferably) a plurality of endless metal bands, disposed radially around each other, each element being provided with a radially outward directed carrier contact plane for contacting a radial inner contact plane of said carrier while in operation, characterised in that the carrier contacting face of the transverse element and the inner contacting face of the carrier contacting the contact face the element have a combined roughness R_a that is more than $0.6 \mu\text{m}$, preferably over $0.75 \mu\text{m}$.

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2. Belt according to claim 1, characterised in that the roughness R_a of the carrier inner inward facing (2) is larger than R_a 0.8.

3. Belt according to claim 1 or 2, characterised in that the surface profiling is realised by grooves disposed in crossing sets.

4. Belt according to claim 3 or 4, characterised in that the shape of the carrier contacting face of the transverse element, taken in cross section thereof and in the belt longitudinal direction, corresponds to a radius of curvature substantially preferably larger than the largest running radius specified for the belt.

5. Belt according to any of the preceding claims, characterised in that the carrier contacting face of the element is shaped by a substantially flat surface.

6. Belt according to any of the preceding claims, characterised in that the rocking edge of a transverse element is set less than 1 mm below the saddle surface.

7. Belt according to claim 6, characterised in that the rocking edge is located in a range between 0.4 and 0.8 mm below the saddle surface.

8. Transmission provided with a belt according to any of the preceding claims, in which the belt operates under lubricated conditions provided by a lubricating oil, characterised in that the lubricating oil has a dynamic viscosity η lower or equal to 4 MPa*s, at a nominal temperature of 100 degrees Celsius.

9. Lubricating oil for use in a continuously variable transmission type transmission having the features of claim 8.

10. Transmission including a belt according to claim 1 in which at least one of a remainder of a set of measures provided by the claims 2 to 8 is provided, such that when the belt is operated in a LOW mode of transmission, the friction coefficient between the carrier and an element remains at least virtually constant over a major

~~(a) and~~ part of the regular range of primary shaft rotation speeds to be transmitted, preferably up to 4000 RPM, more preferably up to 6000 RPM.

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